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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/877,238	06/11/2001	Frederick J. Murphy	001223.00015	8640

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EXAMINER

ROGERS, SCOTT A

ART UNIT	PAPER NUMBER
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2625

DATE MAILED: 06/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/877,238

Applicant(s)

MURPHY, FREDERICK J.

Examiner

Scott A. Rogers

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-55 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Priority

Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 112 as follows:

The later-filed application must be an application for a patent for an invention, which is also disclosed, in the prior application (the parent or original nonprovisional application or provisional application). The disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994).

The disclosure of the prior-filed application, Application No. 08/555,911, fails to provide adequate support or enablement in the manner provided by the first paragraph of 35 U.S.C. 112 for one or more claims of this application. The parent application 08/555,911 does not have support for the claimed limitations (i.e., three ports as claimed, MAC, etc.).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-31 and 35-48 are rejected under 35 U.S.C. 102(e) as being anticipated by Rabenko et al (US 6765931 B1).

Referring to claim 1:

Rabenko et al disclose an interface device (cable modem), comprising:

a network port (40) to interface with a packet switched network (57);

a telephony port (50 or 52) to interface with a telephony device (53a or 53b);

a data port (44 or 46) to interface with a data terminal; and

a processor (160) coupled to each of the ports.

In Rabenko et al, see Figs. 2-3 and col. 8, line 24 to col. 9, line 35. Also see claims 1 and 6.

Referring to claim 2:

Rabenko et al disclose the interface device of claim 1 further comprising a transceiver coupled between the processor and the network port. (see col. 8, lines 6-17, and claims 2 and 6).

Referring to claim 3:

Rabenko et al disclose the interface device of claim 2 wherein the transceiver comprises a media access controller (MAC) coupled to the processor, and a modulator

and a demodulator both disposed between the MAC and the network port (see col. 8, lines 35-50, and claims 3 and 7).

Referring to claim 4:

Rabenko et al disclose the interface device of claim 3 wherein the modulator and the demodulation each comprises quadrature amplitude modulation (see col. 7, lines 1-7).

Referring to claim 5:

Rabenko et al disclose the interface device of claim 1 wherein the processor determines whether voices signals from the network port are destined for the data port or the telephony port and couples the voice signals to one of the data port and telephony port based on such determination (see col. 9, lines 31-34, col. 13, lines 37-65, and claims 4 and 8)

Referring to claim 6:

Rabenko et al disclose the interface device of claim 1 further comprising a voice circuit (170) coupled between the telephony port and the processor (see col. 13, line 66 to col. 14, line 31, and claims 5 and 9).

Referring to claim 7:

Rabenko et al disclose the interface device of claim 6 wherein the processor formats voice signals flowing from the telephony port to the processor into voice signal packets, and formats voice signals flowing from the processor to the telephony port into PSTN telephony format (see col. 9, lines 31-34 and col. 13, lines 37-54).

Referring to claim 8:

Rabenko et al disclose the interface device of claim 7 wherein the telephony format comprises pulse code modulation (see col. 14, lines 4-14).

Referring to claim 9:

Rabenko et al disclose the interface device of claim 6 wherein the voice circuit comprises a jitter buffer to receive voice signal packets of varying delay from the processor and compensating for the delay variation of the received voice signal packets (see col. 50, lines 36-45).

Referring to claim 10:

Rabenko et al disclose the interface device of claim 9 wherein the jitter buffer comprises a voice queue, which buffers the received voice signals for a holding time, and a voice synchronizer which adaptively adjusts the holding time of the voice queue (see col. 51, lines 13-30)

Referring to claim 11:

Rabenko et al disclose the interface device of claim 6 wherein the voice circuit comprises a tone exchange to exchange DTMF signals between the telephony port and the processor (see col. 39, lines 49-52 and col. 51, line 31 to col. 52, line 17).

Referring to claim 12:

Rabenko et al disclose the interface device of claim 6 wherein the voice circuit comprises a voice decoder to decode packets of voice signal flowing from the processor to the telephony port, a voice activity detector to detect the voice signals without

speech, and a comfort noise generator to insert comfort noise in place of the voice signals without speech (see col. 50, lines 16-35, col. 50, line 46 to col. 51, line 13).

Referring to claim 13:

Rabenko et al disclose the interface device of claim 6 wherein the voice circuit comprises a voice decoder to decode packets of the voice signals flowing from the processor to the telephony port, a voice activity detector to detect lost voice signals, and a lost packet recovery engine to process the voice signals to compensate for the lost voice signals (see col. 73, line 49 to col. 74, line 17).

Referring to claim 14:

Rabenko et al disclose the interface device of claim 6 wherein the voice circuit comprises a voice encoder to encode the voice signals flowing from the telephony port to the processor, and a voice activity detector to suppresses the voice signals without speech (see col. 48, lines 57-67).

Referring to claim 15:

Rabenko et al disclose the interface device of claim 14 wherein the voice circuit further comprises a comfort noise estimator to generate comfort noise parameters when the voice activity detector suppresses the voice signals without speech (see col. 48, lines 63-67).

Referring to claim 16:

Rabenko et al disclose the interface device of claim 6 wherein the voice circuit further comprises a decoder to decode packets of the voice signals flowing from the processor to the telephony port, and an echo canceller capable of canceling decoded

voice signal echos on voice signals flowing from the telephony port to the processor (col. 52, line 28 to col. 53, line 44).

Referring to claims 17-31:

Rabenko et al disclose the interface device referred to above as a gateway (see col. 2, lines 1-5 and col. 8, lines 23-46). Claims 17-31 correspond to claims 1-16, and are rejected for the same reasons as set forth above.

Referring to claims 35-48:

Claims 35-48 are method claims correspond to the function or operation of the apparatus as recited in claims 1-16 and 17-31, and are rejected for the same reasons as set forth above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rabenko et al as applied to claim 17 above, and further in view of well known prior art.

Referring to claims 32-34:

While Rabenko et al disclose the voice circuit coupled to a processor and connections to a PSTN telephony port, a packet switched telephony port, and a wireless telephony port, Rabenko et al do not disclose the voice circuit integrated with a

processor in a ASIC form factor connected to a PSTN telephony port, a packet switched telephony port, or a wireless telephony port

However, the use an ASIC form factor in such applications as network communication devices is well known in the art.

It would have been obvious to one of ordinary skill in the art to have integrated the voice circuit with a processor in a ASIC form factor connected to a PSTN telephony port, a packet switched telephony port, or a wireless telephony port in order to reduce the number of components in the gateway device and gain the manufacturing and performance advantages associated with the use of more highly integrated circuitry.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 36-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

There is no antecedent basis for claims 36-37. This is a result of an error in claim dependency. For purposes of the rejection above, it was assumed that claim 36 should be dependent from claim 35 and claim 37 should be dependent from claim 36.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott A Rogers whose telephone number is 571-272-7467. The examiner can normally be reached Monday through Friday 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Moore can be reached at 571-272-7437.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to TC2600 Customer Service at 571-272-2600. Official correspondence by facsimile should be sent to 571-273-8300. The USPTO contact Center phone numbers are 800-PTO-9199.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


SCOTT ROGERS
PRIMARY EXAMINER

13 June 2006